SUPPORTING INFECTIOUS DISEASE RESEARCH

Escherichia coli, Strain SS724

Catalog No. NR-50519

Product Description: *Escherichia coli* (*E. coli*), strain SS724 is a glutamase decarboxylase (*gadX*) insertion mutant of the wild type strain E2348/69. Strain E2348/69 was isolated in 1969 during an outbreak of diarrhea in an infant nursery in Taunton, England.

Lot¹: 2230

Manufacturing Date: 30NOV2016

| TEST | SPECIFICATIONS | RESULTS |
|--|--|--------------------------------------|
| Phenotypic Analysis | | |
| Cellular morphology | Gram-negative rods | Gram-negative rods |
| Colony morphology ² | Report results | Circular, low convex, entire, smooth |
| | | and cream (Figure 1) |
| Motility ³ | Motile | Motile |
| VITEK [®] MS (MALDI-TOF) | E. coli | E. coli (99.9%) |
| Antibiotic Susceptibility Profile ⁴ | | |
| HardyDisk [™] AST Disks⁵ | | |
| Chloramphenicol (30 µg) | Susceptible (≥ 18 mm) | Susceptible (24 mm) |
| Kanamycin (30 µg) | Resistant (≤ 13 mm) | Resistant (7 mm) |
| Nalidixic Acid (30 µg) | Resistant (≤ 13 mm) | Resistant (6 mm) |
| Tetracyline (30 μg) | Susceptible (≥ 15 mm) | Susceptible (23 mm) |
| Genotypic Analysis | | |
| Sequencing of 16S ribosomal RNA gene | ≥ 99% sequence identity to <i>E. coli</i> | 99.9% sequence identity to E. coli |
| (~ 740 base pairs) | strain E2348/69 (GenBank: | strain E2348/69 (GenBank: |
| | NC_011601.1) | NC_011601.1) |
| Riboprinter [®] Microbial Characterization System | <i>E. coli</i> (≥ 0.85) | <i>E. coli</i> (0.94) |
| PCR Amplification of Genetic Targets from | | |
| Extracted DNA | | |
| Translocated intimin receptor (<i>tir</i>) | 1000 haas asir smalissa | |
| Wild type <i>tir</i> Δ <i>tir</i> | ~ 1620 base pair amplicon ~ 2260 base pair amplicon | ~ 1620 base pair amplicon |
| S-ribosylhomocysteinase (<i>luxS</i>) | ~ 2260 base pair amplicon | |
| Wild type <i>luxS</i> | ~ 1310 base pair amplicon | ~ 1310 base pair amplicon |
| $\Delta luxS$ | ~ 2590 base pair amplicon | |
| Transcriptional regulator (gadX) | | |
| Wild type <i>gadX</i> | ~ 1300 base pair amplicon | |
| $\Delta gadX$ | ~ 2200 base pair amplicon | ~ 2200 base pair amplicon |
| Type III secretion system ATPase (<i>escN</i>) | | |
| Wild type escN | ~ 710 base pair amplicon | ~ 710 base pair amplicon |
| ∆escN | ~ 1560 base pair amplicon | |
| Flagellin (<i>fli</i> C) | | |
| Wild type <i>fli</i> C | ~ 1560 base pair amplicon | ~ 1560 base pair amplicon |
| ΔfliC | ~ 2200 base pair amplicon | 040 h |
| Plasmid pMAR2 (<i>bfpD</i>) | ~ 840 base pair amplicon | ~ 840 base pair amplicon |
| Purity (post-freeze) ⁶ | Growth consistent with expected | Growth consistent with expected |
| | colony morphology | colony morphology |
| Viability (post-freeze) ² | Growth | Growth |
| | | |

¹NR-50519 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot.

²1 day at 37°C in an aerobic atmosphere on Tryptic Soy agar

³Motility test performed in Remel[™] Motility Test Medium with TTC Indicator for 1 day at 37°C in an aerobic atmosphere

⁴Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S26 (2016)

⁵1 day at 37°C in an aerobic atmosphere on Mueller Hinton agar

⁶Purity of this lot was assessed for 7 days at 37°C in an aerobic atmosphere with 5% CO₂ on Tryptic Soy agar.

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Figure 1: Colony Morphology



Date: 28 AUG 2017

Signature:

BEI Resources Authentication

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